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**SUMMARY  
SITE INVESTIGATION AND REMEDIATION REPORT  
AIRPORT/KLONDIKE AREA  
AT  
PRATT & WHITNEY  
EAST HARTFORD, CONNECTICUT  
EPA ID No. CTD990672081**

RCRA RECORDS CENTER  
FACILITY *Pratt & Whitney*  
ID NO. *CTD 990672081*  
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**Prepared for:**

**PRATT & WHITNEY  
A UNITED TECHNOLOGIES COMPANY  
400 Main Street  
East Hartford, Connecticut 06108**

**Prepared by:**

**LOUREIRO ENGINEERING ASSOCIATES, P.C.  
100 Northwest Drive  
Plainville, Connecticut 06062**

**LEA Comm. No. 68V8124**

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The Rentschler Airport Area

### **North Klondike:**

Explosives Storage Area

M.E.R.L. Area

Undeveloped Land Area - North Klondike

X-312 / X-314 Area

X-401 Area

X-407 Area

X-410 Area

X-415 Area

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Undeveloped Land Area - South Klondike

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## 1. INTRODUCTION

Loureiro Engineering Associates, P.C. (LEA) was retained by Pratt & Whitney (P&W) to conduct a voluntary subsurface investigation at a portion of the P&W facility located at 400 Main Street (Main Street facility) in the Town of East Hartford, Connecticut. The portion of the Main Street facility addressed in this summary report is known as the Airport/Klondike Area (hereinafter referred to as the Site). The subsurface investigation at the Site was undertaken on a voluntary basis pursuant to Section 22a-133x(b) of the Connecticut General Statutes (CGS). It should be noted that Section 22a-133x of the CGS was recently codified and was formerly known as Section 3 of Public Act (PA) 95-183.

The activities at the Main Street facility are also subject to a Voluntary Corrective Action Program (VCAP). On July 17, 1996, P&W and the United States Environmental Protection Agency, Region 1 (EPA-New England) signed a Memorandum of Understanding (MOU) that outlines the principle components of the VCAP. P&W's principal objective, as discussed in the MOU, is to have initiated stabilization activities at the Main Street facility on or before December 31, 1999. With P&W's desire to transfer the Airport/Klondike portion of the Main Street facility in the near future, the Airport/Klondike Area is being taken to final remediation at this time.

Pursuant to Section 22a-133x(a) of the CGS (formerly Section 3(a) of PA 95-183), P&W is going to submit an Environmental Condition Assessment Form (ECAF) to the State of Connecticut Department of Environmental Protection (DEP). P&W is completing and submitting the ECAF in support of the intention to perform the investigation and, as necessary, the remediation of the Site under the direction of a Licensed Environmental Professional (LEP) pursuant to Section 22a-133x(b) of the CGS.

Preliminary discussions held with the DEP have indicated that the voluntary investigation and remediation of the Site could be conducted pursuant to Section 22a-133x(b) of the CGS. The provisions of Section 22a-133x(b) allow for the investigation and remediation of a site under the direction of an environmental professional licensed pursuant to Section 22a-133v(e) of the CGS. It should be noted that Section 22a-133v was recently codified and was formerly known as Section 4(e) of PA 95-183. This report provides documentation of the site characterization investigations that have been performed to characterize the nature and delineate the extent of contamination identified on the Site, provides documentation of the remediation activities that

have been conducted, and provides relevant information necessary to verify that the investigation and remediation have been performed in accordance with prevailing standards and guidelines.

## **1.1 Background**

The P&W Main Street facility is located on over 960 acres with over 6.5 million square feet of floor area for manufacturing, research, office space, and space for related activities and support services. The Main Street facility has been used for the manufacture of aircraft engines and aircraft engine components since December 1929. Operations at the facility include (or have included in the past) metal parts machining, vapor degreasing, chemical etching, cleaning, electroplating, painting, assembly and testing, and research operations.

To the east of the main complex of the Main Street facility lies the Airport/Klondike Area consisting of the Rentschler Field and an area known as the Klondike. The Airport/Klondike Area was used for experimental test operations as well as ancillary support operations for the main complex. This approximately 600 acre Airport/Klondike Area is the Site as addressed in this report.

## **1.2 Goals and Objectives**

The primary objective of the subsurface investigation was to determine whether or not there has been a release(s) to soil or groundwater due to activities conducted at the Site, and if a release is identified, to determine if remediation is required. Therefore, the subsurface investigations were conducted in a manner that would support evaluation of the need for remediation in accordance with the requirements of the Connecticut Remediation Standard Regulation (Sections 22a-133k-1 through 22a-133k-3) of the Regulations of Connecticut State Agencies (RCSA).

The subsurface investigation was designed with the goal of providing sufficient information to characterize the nature, and delineate the extent of contamination detected on the Site. To achieve the stated goal and objectives, the subsurface investigation was designed to include both environmental setting and contaminant delineation investigations. The objective of the environmental setting activities was to develop a site-wide understanding of environmental conditions in soils and groundwater, particularly in the context of how those conditions might affect the fate and transport of potential contaminants. The environmental setting investigations were designed to characterize the unconsolidated materials in terms of physical characteristics to define the stratigraphy and soil properties of both the saturated and unsaturated zones across the Site.

The objective of the contaminant delineation investigation was to define the nature, and delineate the extent of soil and groundwater contamination at the Site. The contaminant delineation investigation was designed to include both initial and focused soil sampling activities and site-wide groundwater sampling activities. The initial activities were designed to quickly evaluate large portions of the Site and included geophysical surveying consisting of both time-domain electromagnetic induction (TDEM) and magnetometry and soil vapor surveying. The results of the initial activities were used to direct the placement of soil borings and test-pit excavations to be conducted in the focused soil sampling activities in select areas at the Site. Groundwater contamination is evaluated from a site-wide perspective due to the nature of groundwater movement and contaminant transport.

### **1.3 Report Organization**

This summary report documents the investigation and remediation activities completed for the Airport/Klondike Area between June 1996 and June 1998, interprets the data collected, and provides conclusions derived from this data.

#### **1.3.1 Main Document Sections and Appendices**

In presenting the investigation and remediation activities completed for the Airport/Klondike Area, section discussions are followed by supporting tables, figures, and drawings. The following is a general description of the contents of each of the following sections of the report.

- Section 2 includes a summary facility description and includes pertinent background information. Section 2 includes information regarding facility operations and former investigations conducted at the Site.
- Section 3 describes the methodologies for the field investigation activities performed during the Site characterization. These activities included the performance of soil vapor and geophysical surveys, soil boring installation, monitoring well installation, the performance of test-pit excavations, and soil and groundwater sampling.
- Section 4 describes the methodologies for the management, documentation, and presentation of the data collected as part of the investigation and remediation activities.
- Section 5 presents the results of the environmental setting investigations conducted at the Site. Section 5 details the environmental setting of the Site and includes

discussions of the site-specific geologic and hydrogeologic conditions encountered and discussions of regional geologic and hydrogeologic conditions as derived from available published information.

- Section 6 presents a site-wide overview of the soil and groundwater analytical results obtained during the contaminant delineation investigations.
- Section 7 provides an evaluation of the soil and groundwater data against the applicable numeric criteria established pursuant to the Remediation Standard Regulation (RSR).
- Section 8 presents the remediation activities that were conducted at the site to satisfy the RSR.
- Section 9 presents a summary of the findings of the investigation and remediation activities performed to date and conclusions.

### **1.3.2 Tables, Figures, and Drawings**

To maintain the readability of this report and to prevent the numerous tables and figures from interfering with the flow of the text, all of the tables, figures, and drawings have been placed after the final text sections of the main body of the report. Table and figure groupings are marked with dividers so readers can easily refer to them when necessary. Supporting documents, including daily field reports, analytical data, boring logs, well completion logs, and geophysical investigation reports can be provided under separate cover.

### **1.3.3 Unit-Specific Technical Memoranda**

Technical Memoranda (TMs) that present the results of soil sampling and analysis in the vicinity of specific Environmental Units that were investigated as part of the Site investigation activities have been prepared to aid in the identification and evaluation of sources or potential sources of contamination at the Airport/Klondike Area of the P&W Main Street facility. These Unit-Specific Technical Memoranda (USTMs) include pertinent background information for each of the Environmental Units for which a subsurface investigation was conducted. USTMs were also prepared for those units that did not warrant a subsurface investigation. As applicable, each USTM includes the rationale for conducting any investigation activities at that location, an outline of any investigation that was performed, analytical results from the investigation, and any conclusions based on the data collected.

In cases where remediation activities were conducted, each USTM also includes the rationale for conducting any remediation activities at that location, an outline of any remediation activities that were performed, the analytical results upon completion of the remediation activities, and conclusions based on the data collected.

#### **1.3.4 Activity Technical Memoranda**

Technical Memoranda describing investigation or remediation activities that were undertaken as part of the Site investigation and remediation have been included as part of the report to document those activities in greater detail than would be feasible in the main body of the report. In all, four TMs have been prepared. The titles are noted below:

- TM 1, *Monitoring Well Installation and Development and Soil Sampling*
- TM 2, *Water-level Measurements and Site Survey Data*
- TM 3, *Groundwater Sampling and Quality*
- TM 4, *Background Soil Data*

These TMs have been presented in several separate volumes following the main body of the report and the volumes containing the USTMs.



**TABLE 1  
ENVIRONMENTAL UNITS**

Airport/Klondike Area  
Pratt & Whitney Main Street Facility

	AREA USTM	INDIVIDUAL USTM	DATE SUBMITTED	DATE REVIEWED	DATE REVISED
<b>NORTH AIRPORT AREA</b>					
Rentschler Field	X		3/31/98		
Runway Area	O				
Former Army Barracks Septic Systems		X			
<b>Silver Lane Pickle Company</b>					
Underground Storage Tanks		X			
Soil Piles		X			
<b>NORTH KLONDIKE AREA</b>					
<b>X-401 Area</b>	X		4/2/98		
X-401 Test Stand	O				
X-402 Test Stand	O				
X-403 Test Stand	O				
Equipment Shed	O				
Pavilion	O				
Locker Room	O				
Fire Training Area C		X			
X-401 Drywells		X			
X-401 Locker Room Septic System		X			
<b>X-410 Area</b>	X		3/31/98		
X-442 Storage Room	O				
X-196 Control Room	O				
X-410 Test Stand	O				
X-411 Test Stand	O				
X-412 Test Stand	O				
X-411 Control Room	O				
X-411 Compressor Room	O				
Maintenance and Storage Building	O				
X-410 Drain Pipe		X			
Maintenance and Storage Septic System		X			
X-410 Oil Rack		X			
<b>X-415 Area</b>	X		4/3/98		
X-415 Combustion Lab	O				
X-416 Test Stand	O				
X-417 Test Stand	O				
X-419 and X-420 Test Stands	O				
X-426 and X-427 Test Stands	O				
X-449 Test Stand	O				
X-450 Test Stand	O				
X-451 Test Stand	O				
Infra-Red Lab X-450	O				
X-415 Septic System and Drywell		X			
X-415 Boiler Room AST		X			
<b>M.E.R.L. Area</b>	X		3/31/98		
M.E.R.L. Explosives Forming	O				
Control Room	O				
Storage Building	O				
Undesignated Building	O				
Fire Training Area D		X			
MERL Drywell		X			
<b>Explosives Storage Area</b>	X		4/2/98		
Outside Storage Area	O				
Fill Area		X			
Underground Storage Tank		X			
Explosives Storage Building		X			
Outside Chemical Storage Shed		X			
Chemical Storage Building		X			
<b>North Klondike Undeveloped Land Area</b>	X		4/3/98		
Undeveloped Land	O				
Outside Storage Area		X			
Soil Piles		X			
<b>X-430 Area</b>	X		3/31/98		
X-430 Test Stand	O				
X-431 Test Stand	O				
X-432 Test Stand	O				
X-433 Test Stand	O				
X-434 Test Stand	O				
X-435 Test Stand	O				
X-436 Test Stand	O				
Stainless Steel Tank		X			
Aboveground Storage Tank		X			
<b>X-407 Area</b>	X		3/31/98		
X-404 Test Stand	O				
X-405 Test Stand	O				

**TABLE 1  
ENVIRONMENTAL UNITS**

Airport/Klondike Area  
Pratt & Whitney Main Street Facility

	AREA USTM	INDIVIDUAL USTM	DATE SUBMITTED	DATE REVIEWED	DATE REVISED
X-406 Test Stand	O				
X-407 Test Stand	O				
X-408 Test Stand	O				
X-408 Test Rig Room	O				
X-409 Test Stand	O				
North Klondike Fire Pump House	O				
Compressor Building	O				
PCB Storage Building		X			
<b>X-194 (X-448) Area</b>	X				
X-448 Test Stand	O				
Control Room	O				
Block House	O				
Outside Storage	O				
X-194 Area	O				
Aboveground Storage Tank		X			
<b>X-312/X-314 Area</b>	X		4/2/98		
X-312 Test Stand	O				
X-314 Test Stand	O				
X-312 Tank Farm		X			
X-314 Septic System		X			
<b>SOUTH KLONDIKE AREA</b>					
<b>Tie-Down Area</b>	X		4/2/98		
X-309 Test Stand	O				
Fire Training Area A & B-24 Test Stand		X			
USTs and AST		X			
<b>Firing Range Area</b>					
Firing Range		X			
<b>Former Linde Gas/Chemical Storage Building Area</b>					
Former Linde Gas		X			
Linde Bldg. Fuel Oil UST, Load/Unload		X			
Drums and Dumpster Areas		X			
Former Underground Storage Tank		X			
Linde Septic System		X			
<b>Cryogenics</b>	X				
South Klondike Fire Pump House	O				
Cryogenics Building	O				
Cryogenics Drywell & Septic System		X			
Underground Storage Tank		X			
Aboveground Storage Tank		X			
		X			
<b>Virgin Products Storage Area</b>					
Storage Area 2		X			
Storage Area 3		X			
Quonset Hut/Drum Storage Area		X			
<b>X-307 Area</b>	X		4/3/98		
Test Stand X-307	O				
X-307 Septic System		X			
X-307 Rubble Piles		X			
<b>South Klondike Undeveloped Land Area</b>	X		4/3/98		
Undeveloped Land	O				
Debris Piles		X			
<b>SOUTH AIRPORT AREA</b>					
<b>Fire Training Area B</b>					
Fire Training Area B		X			
<b>Contractor Storage Area</b>					
Contractor Storage Area		X			
<b>Former Storage Area</b>					
RCRA Waste Piles		X			
<b>Tank Trailer Storage Area</b>					
Tank Trailer Storage Area		X			
<b>South Airport Fill Area</b>					
Fill Area		X			

X - if a combined UST to be submitted  
 O - if discussed under area USTM  
 bold completed & submitted

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2637

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

**Purpose of Target Sheet:**

☒ **Oversized (in Site File)**      ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged**      ☐ **Other (Provide Purpose Below)**

\_\_\_\_\_  
\_\_\_\_\_

**Description of Oversized Material, if applicable:**

**DRAWING 1: SUMMARY SITE INVESTIGATION AND  
REMEDATION REPORT, SITE LOCATION MAP &  
ENVIRONMENTAL UNITS**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

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**\* Please Contact the EPA New England RCRA Records Center to View This Document \***

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### **North Airport:**

The Rentschler Airport Area

### **North Klondike:**

Explosives Storage Area

M.E.R.L. Area

X-312 / X-314 Area

X-401 Area

X-407 Area

X-410 Area

X-430 Area

### **South Klondike:**

Tie-Down Area

## **UNIT SPECIFIC TECHNICAL MEMORANDUM: RENTSCHLER AIRPORT AREA PRATT & WHITNEY, EAST HARTFORD**

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**AREA:** North and South Airports

**SUB-AREA:** The Rentschler Airport

**ENVIRONMENTAL UNIT:** Rentschler Airport Runway Area

**Location:** The Rentschler Airport Runway Area is located to the east of the main facility south of Silver Lane, and to the north of Brewer Street (Drawing 1).

**Description:** The Rentschler Airport Runway Area was developed over the years and presently consists of two runways, each approximately one-mile long, running north to south and southwest to northeast.

**Dates of Operation:** The Rentschler Airport Runway Area was originally built in 1931, expanded over the years, and eventually closed in December 1994.

**Processes:** The Rentschler Airport Runway Area was used for the take-off and landing of a variety of commercial and military aircraft.

**Specific Contaminants of Concern:** The constituents of concern for the Rentschler Airport Runway Area are jet fuels and aviation gasoline.

**Area-wide Classes of Contaminants:** Jet fuels and aviation gasoline associated with inherent air traffic. Volatile organic compounds (VOCs), Semi-volatile organic compounds (SVOCs), the RCRA 8 metals plus nickel and zinc, polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH). No information relating to the use of items containing all of these contaminants was found. This larger list of possible contaminants was included as an example of constituents that may have been used elsewhere at this Pratt & Whitney facility. Analysis of these constituents was conducted in order to be as comprehensive as possible in the investigation that was conducted

**Potential Release Mechanism:** The most likely release mechanism in the Runway Area is potential spillage which could have affected the underlying soil and groundwater; however, the likelihood of a spill is low in these areas.

### **INVESTIGATION AND REMEDIATION ACTIVITIES:**

Due to the potential for a release associated with this unit, a subsurface investigation to determine the degree and extent of soil contamination was performed in November 1997. Prior to 1997, two investigations were conducted in May 1993 and February 1990. Prior to 1990, no investigation had reportedly been performed.

Various supplemental groundwater investigations have also been conducted in the Rentschler Airport Area. Out of the seven monitoring wells in the immediate vicinity of the Airport Area

elevated concentrations of metals have been detected in three monitoring wells. Elevated concentrations of lead have been detected in both NA-MW-03 and NA-MW-04. Elevated concentrations of arsenic, lead, mercury, and zinc have also been detected in groundwater samples from SK-MW-08D. For a more detailed account of these sampling events refer to the *LEA Technical Memorandum 3 of Groundwater Sampling and Quality* dated March 30, 1998.

#### **1990 through 1993 Investigations (Westinghouse and H&A):**

**Description:** In the Rentschler Airport Area, four soil samples were collected during monitoring well installations conducted by Westinghouse in 1990. Samples were collected at SA-MW-01, SA-MW-02I (two samples), and SK-MW-08S. In total, the samples were analyzed for PCBs, VOCs, and metals by the Toxicity Characteristic Leaching Procedure (TCLP).

During the 1993 investigation two soil samples were also collected during monitoring well installations from SK-MW-16. The soil samples were analyzed for VOCs, PCBs, the RCRA 8 metals, and TPH. A summary of the samples collected and analyses performed during these two previous investigations is included in Table 1. Sampling locations are shown on Drawing 1.

**Investigation Results:** Only one VOC was detected in the soil sample collected from SK-MW-08S. Methylene Chloride (MC) was detected at a concentration close to the method detection limit in this sample. No other VOCs were detected in the soil samples that were submitted for laboratory analysis. One or more of the metals analyzed by TCLP were detected in one soil sample from SA-MW-02I. These metals included cadmium and lead, and were present in concentrations similar to reported concentrations of background metals present in the undeveloped land areas of the Airport/Klondike (F&O, 1994). No PCBs were detected in the soil samples submitted to the fixed laboratory during the 1990 soil investigation.

Barium, chromium, lead, nickel, and zinc were the only metals detected in the soil sample submitted to the fixed laboratory during the 1993 investigation. The reported concentrations of metals were similar to background concentrations of metals (F&O, 1994). No VOCs, PCBs, or TPH were detected in the soil samples submitted during this investigation. Concentrations of constituents detected in soil samples collected for this unit are presented in Table 2.

**Data Evaluation and Conclusions:** Minimal future investigations seem to be warranted in the Rentschler Airport Runway Area due to the low likelihood of a release and the lack of significant contaminant detects in the soil samples that were analyzed at the fixed laboratories.

Soil Samples taken from SA-MW-01 and SA-MW-02I are discussed in more detail in two separate Unit Specific Technical Memorandums, *Fire Training Area "B"* and the *Contractor Storage Area*, respectively.

#### **November 1997 Investigation (LEA):**

**Description:** During airport expansion activities conducted in 1945 fill was placed in low-lying areas of the North Airport. In order to investigate the potential for contaminated fill used in these low lying areas 39 Geoprobe® soil borings (NA-SB-63 through NA-SB-101) were advanced to a depth of 4 feet in various suspected low lying areas of the North Airport, based on historical

aerial photographs. Sampling locations are shown on Drawing 1. When visual or instrument evidence (flame ionization detector) indicated potential contamination, samples would be collected in 2-foot intervals to a depth of 16 feet or to the clay layer, whichever came first. Samples would then be screened for select VOCs in the LEA laboratory and at least one sample per boring would have been submitted for fixed laboratory analysis of VOCs, PCBs, SVOCs, TPH, and metals.

**Investigation Results:** Based on visual and instrument evidence no contaminated fill was encountered during this investigation. Therefore, no samples were submitted for laboratory analysis.

**Data Evaluation and Conclusions:** No further investigation is warranted in the Rentschler Airport Runway Area due to the low likelihood of a release, conformational laboratory analysis, and the lack of visual and instrument evidence that would have indicated that contamination was present.

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**Table 1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION**  
**P&W East Hartford: Rentschler Airport Area**

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Sample Information						Analysis Information								
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Extraction	Miscellaneous
SA-MW-01	CAS 2075090	2/13/90	7.5	9.0	SB		x				x			
SA-MW-02I	CAS11010020	2/16/90	1.0	2.0	SB								X	
SA-MW-02I	CAS11060080	2/16/90	6.0	8.0	SB		x							
SK-MW-08S	CAS10090	2/16/90	9.0		SB		X							
SK-MW-16	02165051393	5/13/93			SB		x							
SK-MW-16	02169051393	5/13/93			SB						x	X	x	X
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Notes: 1. Legend: X - Analysed; at least one analyte over the detection limit; x - Analysed, no analytes in group over the detection limit  
2. Printed on 03/31/98

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Notes: 1. Only Detects Shown  
2. Printed on 03/31/98

**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

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	Location ID	SA-MW-01	SA-MW-02I	SA-MW-02I	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16
	Sample ID	CAS 2075090	CAS11010020	CAS11060080	CAS10090	02165051393	02169051393	02169051393
	Sample Date	02/13/1990	02/16/1990	02/16/1990	02/16/1990	05/13/1993	05/13/1993	05/13/1993
	Sample Time				:			
	Sample Depth	7.5' - 9.0'	1.0' - 2.0'	6.0' - 8.0'	9.0'			
	Laboratory	NETA	NETA	NETA	NETA	ENS	ENS	ENS
	Lab. Number	NETA09002	NETA09009	NETA09015	NETA09014	0286960001SA	0286960002SA	0290040017SA
Constituent	Units							
Date Metals Analyzed	-						05/26/1993	
Date Organics Analyzed	-					05/24/1993		
Date PCBs Analyzed	-						05/24/1993	
Date of Metals TCLP Analysis	-							06/17/1993
Arsenic	mg/kg						<0.59	
Arsenic (TCLP)	mg/l		<0.300					
Barium	mg/kg						13.8	
Barium (TCLP)	mg/l		<0.051					
Beryllium	mg/kg						<0.23	
Cadmium	mg/kg						<0.59	
Cadmium (TCLP)	mg/l		0.004					
Chromium (TCLP)	mg/l		<0.050					
Chromium (Total)	mg/kg						5.6	
Chromium (Total) (TCLP)	mg/l							<0.010
Lead	mg/kg						2.5	
Lead (TCLP)	mg/l		0.130					<0.050
Mercury	mg/kg						<0.12	
Mercury (TCLP)	mg/l		<0.002					
Nickel	mg/kg						6.4	
Nickel (TCLP)	mg/l							<0.040
Selenium	mg/kg						<0.59	
Selenium (TCLP)	mg/l		<0.100					
Silver	mg/kg						<1.2	
Silver (TCLP)	mg/l		<0.009					
Zinc	mg/kg						12.0	
PCB 1016	µg/kg	<0010					<9.7	
PCB 1221	µg/kg	<0010					<9.7	
PCB 1232	µg/kg	<0010					<9.7	

Notes: 1. Printed on 04/01/98

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**Table 3**  
**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

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	Location ID	SA-MW-01	SA-MW-02I	SA-MW-02I	SK-MW-08S	SK-MW-16	SK-MW-16	SK-MW-16
	Sample ID	CAS 2075090	CAS11010020	CAS11060080	CAS10090	02163051393	02169051393	02169051393
	Sample Date	02/13/1990	02/16/1990	02/16/1990	02/16/1990	05/13/1993	05/13/1993	05/13/1993
	Sample Time				:			
	Sample Depth	7.5' - 9.0'	1.0' - 2.0'	6.0' - 8.0'	9.0'			
	Laboratory	NETA	NETA	NETA	NETA	ENS	ENS	ENS
	Lab. Number	NETA09002	NETA09009	NETA09015	NETA09014	0286960001SA	0286960002SA	0290040017SA
Constituent	Units							
PCB 1242	µg/kg	<0010					<9.7	
PCB 1248	µg/kg	<0010					<9.7	
PCB 1254	µg/kg	<0010					<9.7	
PCB 1260	µg/kg	<0010					<9.7	
Corrosivity	units						6.9	
Cyanide (Reactive)	mg/kg						<0.12	
Ignitability	deg f						<ND	
Sulfide (Reactive)	mg/kg						<1.2	
Total Petroleum Hydrocarbons	mg/kg						<23	
Benzene	µg/kg	<5		<5	<5	<51		
Bromoform	µg/kg	<5		<5	<5	<510		
Carbon Disulfide	µg/kg	<5		<5	<5			
Carbon Tetrachloride	µg/kg	<5		<5	<5	<51		
Chlorobenzene	µg/kg	<5		<5	<5	<200		
Chlorodibromomethane	µg/kg	<5		<5	<5	<100		
Chloroethane	µg/kg	<5		<5	<5	<510		
Chloroform	µg/kg	<5		<5	<5	<51		
Dichlorobenzene, 1,2-	µg/kg					<51		
Dichlorobenzene, 1,3-	µg/kg					<51		
Dichlorobenzene, 1,4-	µg/kg					<51		
Dichlorobromomethane	µg/kg	<5		<5	<5	<100		
Dichloroethane, 1,1-	µg/kg	<5		<5	<5	<51		
Dichloroethane, 1,2-	µg/kg	<5		<5	<5	<100		
Dichloroethylene, 1,1-	µg/kg	<5		<5	<5	<51		
Dichloroethylene, 1,2-	µg/kg					<51		
Dichloroethylene, 1,2-trans-	µg/kg	<5		<5	<5			
Dichloropropane, 1,2-	µg/kg	<5		<5	<5	<100		
Dichloropropylene, 1,3-cis-	µg/kg	<5		<5	<5	<200		

Notes: 1. Printed on 04/01/98

LEA

### Table 3

Page 3 of 3

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Notes: 1. Printed on 04/01/98

LEA

**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
P&W East Hartford: Rentschler Airport Area

Location Identifier SA-MW-01

Location Identifier	SA-MW-01					
Sample Date	2/13/90					
Sample Identifier	CAS 2075090					
		From 7.5 to 9.0			Soil Boring	
Chemical Name	Concentration	Units	Flags	Lab.	Lab. Number	Chemical Class
PCB 1016	ND<0010	µg/kg		NETA	NETA09002	PCBs
PCB 1221	ND<0010	µg/kg		NETA	NETA09002	PCBs
PCB 1232	ND<0010	µg/kg		NETA	NETA09002	PCBs
PCB 1242	ND<0010	µg/kg		NETA	NETA09002	PCBs
PCB 1248	ND<0010	µg/kg		NETA	NETA09002	PCBs
PCB 1254	ND<0010	µg/kg		NETA	NETA09002	PCBs
PCB 1260	ND<0010	µg/kg		NETA	NETA09002	PCBs
Benzene	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Bromoform	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Carbon Disulfide	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Carbon Tetrachloride	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Chlorobenzene	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Chlorodibromomethane	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Chloroethane	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Chloroform	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichlorobromomethane	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloroethane, 1,1-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloroethane, 1,2-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloroethylene, 1,1-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloroethylene, 1,2-trans-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloropropane, 1,2-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloropropylene, 1,3-cis-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Dichloropropylene, 1,3-trans-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Ethylbenzene	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Hexanone, 2-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Methyl Bromide	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Methyl Chloride	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Methyl Ethyl Ketone	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Methylene Chloride	ND<5	µg/kg		NETA	NETA09002	Volatile Organics
Methyl-2-pentanone, 4-	ND<5	µg/kg		NETA	NETA09002	Volatile Organics

**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Location Identifier SA-MW-01

Styrene	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Tetrachloroethane,1,1,2,2-	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Tetrachloroethylene	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Toluene	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Trichloroethane,1,1,1-	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Trichloroethane,1,1,2-	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Trichloroethylene	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Vinyl Acetate	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Vinyl Chloride	ND<5	µg/kg	NETA	NETA09002	Volatile Organics
Xylenes (Total)	ND<5	µg/kg	NETA	NETA09002	Volatile Organics

Location Identifier SA-MW-02I

Sample Date 2/16/90

Sample Identifier CAS11010020

From 1.0 to 2.0

Soil Boring

Chemical Name	Concentration	Units	Flags	Lab.	Lab. Number	Chemical Class
Arsenic	ND<0.300	mg/l		NETA	NETA09009	Metals (TCLP)
Barium	ND<0.035	mg/l		NETA	NETA09009	Metals (TCLP)
Cadmium	0.005	mg/l		NETA	NETA09009	Metals (TCLP)
Chromium	ND<0.050	mg/l		NETA	NETA09009	Metals (TCLP)
Lead	0.130	mg/l		NETA	NETA09009	Metals (TCLP)
Mercury	ND<0.002	mg/l		NETA	NETA09009	Metals (TCLP)
Selenium	ND<0.100	mg/l		NETA	NETA09009	Metals (TCLP)
Silver	ND<0.009	mg/l		NETA	NETA09009	Metals (TCLP)

Sample Identifier CAS11060080

From 6.0 to 8.0

Soil Boring

Chemical Name	Concentration	Units	Flags	Lab.	Lab. Number	Chemical Class
Benzene	ND<5	µg/kg		NETA	NETA09015	Volatile Organics
Bromoform	ND<5	µg/kg		NETA	NETA09015	Volatile Organics
Carbon Disulfide	ND<5	µg/kg		NETA	NETA09015	Volatile Organics
Carbon Tetrachloride	ND<5	µg/kg		NETA	NETA09015	Volatile Organics
Chlorobenzene	ND<5	µg/kg		NETA	NETA09015	Volatile Organics
Chlorodibromomethane	ND<5	µg/kg		NETA	NETA09015	Volatile Organics

**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
P&W East Hartford: Rentschler Airport Area

Location Identifier SA-MW-021

Chloroethane	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Chloroform	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichlorobromomethane	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloroethane,1,1-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloroethane,1,2-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloroethylene,1,1-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloroethylene,1,2-trans-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloropropane,1,2-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloropropylene,1,3-cis-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Dichloropropylene,1,3-trans-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Ethylbenzene	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Hexanone,2-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Methyl Bromide	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Methyl Chloride	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Methyl Ethyl Ketone	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Methylene Chloride	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Methyl-2-pentanone,4-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Styrene	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Tetrachloroethane,1,1,2,2-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Tetrachloroethylene	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Toluene	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Trichloroethane,1,1,1-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Trichloroethane,1,1,2-	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Trichloroethylene	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Vinyl Acetate	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Vinyl Chloride	ND<5	µg/kg	NETA	NETA09015	Volatile Organics
Xylenes (Total)	ND<5	µg/kg	NETA	NETA09015	Volatile Organics

Location Identifier SK-MW-08S

Sample Date 2/16/90

Sample Identifier CAS10090

: At 9.0

Soil Boring

Chemical Name	Concentration	Units	Flags	Lab.	Lab. Number	Chemical Class
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**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Location Identifier SK-MW-08S

Benzene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Bromoform	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Carbon Disulfide	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Carbon Tetrachloride	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Chlorobenzene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Chlorodibromomethane	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Chloroethane	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Chloroform	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichlorobromomethane	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloroethane, 1,1-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloroethane, 1,2-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloroethylene, 1,1-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloroethylene, 1,2-trans-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloropropane, 1,2-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloropropylene, 1,3-cis-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Dichloropropylene, 1,3-trans-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Ethylbenzene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Hexanone, 2-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Methyl Bromide	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Methyl Chloride	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Methyl Ethyl Ketone	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Methylene Chloride	10	µg/kg	NETA	NETA09014	Volatile Organics
Methyl-2-pentanone, 4-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Styrene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Tetrachloroethane, 1,1,2,2-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Tetrachloroethylene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Toluene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Trichloroethane, 1,1,1-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Trichloroethane, 1,1,2-	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Trichloroethylene	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Vinyl Acetate	ND<5	µg/kg	NETA	NETA09014	Volatile Organics
Vinyl Chloride	ND<5	µg/kg	NETA	NETA09014	Volatile Organics



**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
P&W East Hartford: Rentschler Airport Area

Location Identifier SK-MW-08S

Xylenes (Total) ND<5 µg/kg NETA NETA09014 Volatile Organics

Location Identifier SK-MW-16  
Sample Date 5/13/93  
Sample Identifier 02165051393

## Soil Boring

Chemical Name	Concentration	Units	Flags	Lab.	Lab. Number	Chemical Class
Benzene	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Bromoform	ND<510	µg/kg		ENS	0286960001SA	Volatile Organics
Carbon Tetrachloride	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Chlorobenzene	ND<200	µg/kg		ENS	0286960001SA	Volatile Organics
Chlorodibromomethane	ND<100	µg/kg		ENS	0286960001SA	Volatile Organics
Chloroethane	ND<510	µg/kg		ENS	0286960001SA	Volatile Organics
Chloroform	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichlorobenzene,1,2-	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichlorobenzene,1,3-	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichlorobenzene,1,4-	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichlorobromomethane	ND<100	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloroethane,1,1-	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloroethane,1,2-	ND<100	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloroethylene,1,1-	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloroethylene,1,2-	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloropropane,1,2-	ND<100	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloropropylene,1,3-cis-	ND<200	µg/kg		ENS	0286960001SA	Volatile Organics
Dichloropropylene,1,3-trans-	ND<100	µg/kg		ENS	0286960001SA	Volatile Organics
Ethylbenzene	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Ethylene Dibromide	ND<200	µg/kg		ENS	0286960001SA	Volatile Organics
Methyl Bromide	ND<510	µg/kg		ENS	0286960001SA	Volatile Organics
Methyl Chloride	ND<510	µg/kg		ENS	0286960001SA	Volatile Organics
Methylene Chloride	ND<510	µg/kg		ENS	0286960001SA	Volatile Organics
Tetrachloroethane,1,1,2,2-	ND<100	µg/kg		ENS	0286960001SA	Volatile Organics
Tetrachloroethylene	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics
Toluene	ND<51	µg/kg		ENS	0286960001SA	Volatile Organics

**SUMMARY OF ANALYTICAL RESULTS - SOIL**  
**P&W East Hartford: Rentschler Airport Area**

Location Identifier SK-MW-16

Trichloroethane, 1,1,1-	ND<51	µg/kg	ENS	0286960001SA	Volatile Organics
Trichloroethane, 1,1,2-	ND<100	µg/kg	ENS	0286960001SA	Volatile Organics
Trichloroethylene	ND<51	µg/kg	ENS	0286960001SA	Volatile Organics
Trichloro-1,2,2-trifluoroethane, 1,1,2-	ND<100	µg/kg	ENS	0286960001SA	Volatile Organics
Vinyl Chloride	ND<100	µg/kg	ENS	0286960001SA	Volatile Organics
Xylenes (Total)	ND<51	µg/kg	ENS	0286960001SA	Volatile Organics

Sample Identifier 02169051393

Soil Boring

Chemical Name	Concentration	Units	Flags	Lab.	Lab. Number	Chemical Class
Arsenic	ND<0.59	mg/kg		ENS	0286960002SA	Metals
Barium	13.8	mg/kg		ENS	0286960002SA	Metals
Beryllium	ND<0.23	mg/kg		ENS	0286960002SA	Metals
Cadmium	ND<0.59	mg/kg		ENS	0286960002SA	Metals
Chromium (Total)	5.6	mg/kg		ENS	0286960002SA	Metals
Lead	2.5	mg/kg		ENS	0286960002SA	Metals
Mercury	ND<0.12	mg/kg		ENS	0286960002SA	Metals
Nickel	6.4	mg/kg		ENS	0286960002SA	Metals
Selenium	ND<0.59	mg/kg		ENS	0286960002SA	Metals
Silver	ND<1.2	mg/kg		ENS	0286960002SA	Metals
Zinc	12.0	mg/kg		ENS	0286960002SA	Metals
Chromium (Total)	ND<0.010	mg/l		ENS	0290040017SA	Metals (TCLP)
Lead	ND<0.050	mg/l		ENS	0290040017SA	Metals (TCLP)
Nickel	ND<0.040	mg/l		ENS	0290040017SA	Metals (TCLP)
PCB 1016	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
PCB 1221	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
PCB 1232	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
PCB 1242	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
PCB 1248	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
PCB 1254	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
PCB 1260	ND<9.7	µg/kg		ENS	0286960002SA	PCBs
Corrosivity	6.9	units		ENS	0286960002SA	Physical Analysis
Cyanide (Reactive)	ND<0.12	mg/kg		ENS	0286960002SA	Physical Analysis
Ignitability	ND<ND	deg f		ENS	0286960002SA	Physical Analysis
Sulfide (Reactive)	ND<1.2	mg/kg		ENS	0286960002SA	Physical Analysis

SUMMARY OF ANALYTICAL RESULTS - SOIL  
P&W East Hartford: Rentschler Airport Area

Location Identifier SK-MW-16

Total Petroleum Hydrocarbons

ND<23

mg/kg

ENS

0286960002SA Physical Analysis

**US EPA New England  
RCRA Document Management System  
Image Target Sheet**

**RDMS Document ID #** 2637

**Facility Name:** PRATT & WHITNEY - MAIN STREET

**Facility ID#:** CTD990672081

**Phase Classification:** R-5

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☐ **Page(s) Missing (Please Specify Below)**

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**Description of Oversized Material, if applicable:**

**DRAWING 1: RENTSCHLER AIRPORT AREA,**  
**LOCATION & CONSTITUENTS DETECTED MAP**

☒ **Map**      ☐ **Photograph**      ☐ **Other (Specify Below)**

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